DEFENSE INFORMATION INFRASTRUCTURE (DII)

COMMON OPERATING ENVIRONMENT (COE)

**DII COE Version Description Document
for
DCE Cell Manager Segment v1.0.0.1 (Solaris 2.5.1)**
Version Description Document
5/5/97

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1. System Overview

The DCE Cell Manager is a tool used to administer DCE cells. It is a graphical interface used by cell managers to monitor and control DCE processes and applications. There are three different management tools available within Cell Manager. The first is the Security Manager. This tool is used to administer the security registry. From here the cell manager can add users and groups, change ACLs and control registry policies. The second tool is the Host Configuration Manager. This tool is used to control the various DCE hosts within the cell. From here, one can alter the makeup of the cell. The administrator can add hosts, alter their roles within the cell, promote a slave server to a master. The last tool is the Host Namespace Manager. This tool is used to monitor the host namespace of the DCE cell

2. Reference Documents

- *Transarc DCE Introduction*
- *Transarc DCE Command Reference*
- *Cell Manager 1.6 Overview and User's Guide*
- *Cell Manager 1.6 Security Manager User's Guide*
- *Cell Manager 1.6 Configuration Manager User's Guide*
- *Cell Manager 1.6 Namespace Manager User's Guide*

3. Version Description

3.1 Inventory of Materials

- Magnetic Media: Two 8mm tapes consisting of relative tar of the DCE Cell Manager Segment, Version 1.0.0.1/Solaris 2.5.1, May 5, 1997
- Version Description Document Defense Information Infrastructure (DII) Common Operating Environment (COE) DCE Cell Manager Segment, Version 1.0.0.1, May 5, 1997
- *Installation Instructions for the DCE Cell Manager Segment* v1.0.0.1, May 5, 1997

3.2 Software Changes

Namespace Manager:

- Ability to expand the DFS file system from the junction point in the CDS namespace. The user can use this functionality to easily modify ACLs for multiple DFS entries.

- Ability to examine the CDS namespaces of other cells. The cross-cell relationship between the cells must have already been initialized.

Configuration Manager:

- Ability to view a customized sub-set of hosts in the cell.

- If no customized view has been saved, the only hosts running Security,
  CDS, and DTS servers initially displayed.

Security Manager:

- Extended Registry Attribute (ERA) support.

- Ability to examine the security registries of other cells. The cross-cell
  relationship between the cells must have already been initialized.

- "Quick Load" option on the Display Options window. This option will only
  load the name of the principal in the main window. The end result can be
  a speed increase of 50x when loading large numbers of users (> 1000).

4. Installation Instructions

Reference the *Installation Instructions for the DCE Cell Manager Segment* v1.0.0.1 for
instructions on installing DCE Cell Manager.

5. Known Problems and Errors

General:

- If you receive the following type of error message, contact Chisholm
  support:

    Message <number> not found in catalog.

- If you receive the following type of error message, consult your DCE
  documentation:

    DCE Error: <error message>

  If the previous message contains a hex error code, a DCE error message
  can be provided by executing the following command:

      > dcecp -c errtext <hex number>

- Make sure that your available ticket time is sufficiently ample to cover

any time-consuming operations you might initiate during your application
session. Time-consuming operations include deleting many security or
CDS namespace objects and importing many principals and security groups.

- Depending on your system, closing the window in which you started the
  Cell Manager or issuing a Ctrl-C in the shell in which you've started the
  Cell Manager may cause the application to crash.

- Values dated beyond the year 2037 may become corrupted.

Configuration Manager:

- Do not set the Polling Interval in the Tool Options window to a value less
  than 5 (minutes).

- Polling of the DCE base daemons cannot occur unless the cellmgrd daemon
  is executing on the remote node. If polling frequently, memory creep
  may occur on the Agent daemons on the polled nodes.
  In small cells (less than 10 hosts polled), local polling of DCE daemons
  may be re-enabled. Contact Chisholm Support for further instructions.

- The status for an individual DCE daemon, most commonly dtsd, can
  potentially be overlooked if the agent does check the state of the daemon
  between the time when the daemon fails and when the RPC endpoint map is
  cleaned out by DCE.

- When configuring a host, enter the name of the host in the same format in
  which it will appear in the /.:/hosts directory. This format is generally
  the same as the value returned by the "uname -n" command when executed on
  the host to be configured.

- When creating a Local or Global NTP Time Provider, there is no
  confirmation that an NTP Time Provider is actually running on the
  specified remote node.

- Do not use the tool to stop DCE on a host if it is running the only
  security server in the cell. If you do, you will have to restart DCE on
  that host using your machine vendor's native scripts. This problem does
  not occur of you have more than one security server in the cell.

- If while unconfiguring a host you receive a warning indicating that the
  host is running an additional CDS or Security server, take these steps:

  1) Cancel the unconfiguration process for the host.
  2) Remove the servers from the host individually using the Remove

Additional Servers submenu.
3) Unconfigure the host.

- You may need to manually clean out the /tmp and /opt/cellmgr/local
  directories. Certain operations may leave log files there.
  Note: Do not remove the /opt/cellmgr/local/dce_type or
      /opt/cellmgr/local/cellmgr_db file.

- Update Selected will not change the IP address under the circumstance
  where the NIS maps change. You must shut down the Configuration Manager
  and restart it to see the new IP address.

Security Manager:

- Importing a large number of users and groups can take a long time and can
  potentially exhaust system resources since this operation is memory
  intensive. Also, if your ticket expires during the import, the import
  operation will not be completed. We suggest that you refresh the ticket
  prior to importing a large number of users and groups.

- When using the Replica State window, if you receive an error indicating
  that the replica could not be contacted, click Update All to retrieve the
  updated information. This is most likely to appear when starting a
  replica, deleting a read-only replica, or restoring the master server.

- The File list in the Load and Save Template windows displays the entire
  pathname to the file instead of just the file name. It does not
  provide a scroll bar. The name of the template file will have to be
  entered by hand in the Selection field.

Agent:

- Occasionally monitor memory usage when running Cell Manager for extended
  periods of time (one week) to ensure that memory creep does not
  unexpectedly cause problems.

- The rate of memory consumption by the Agent increases with the rate
  DCE polling by the Configuration Manager.

6. Release Notes

General:

If you run Netscape or any other web browser, it is likely that Cell Manager

will not be able to allocate the colors it needs for display purposes. In
this case, you have the following options:

- Shut down the web browser, start the Cell Manager applications, then
  restart the web browser after all applications have started and are ready
  to begin administration functions.

- Specify that Cell Manager use a private color map. To specify a private
  color map, as root on the machine, go to the /opt/cellmgr/lib/C directory
  and edit the files CDSGraf, DCEHost, DCELogin, and DCEUser to change the
  line containing the string "privateColors" from "False" to "True".
  Restart the applications to initiate the change.
  NOTE: This may cause other applications on the screen to become distorted
      while the mouse pointer is in the Cell Manager windows. The
      operation of the other applications will not be effected.

System Requirements:

  The following list identifies the required runtime libraries for both Station (GUI)
   software and the agent (cellmgrd) software.

Solaris DCE 1.1 shared libraries:

    Agent: -ldce -lthread -lucb -ldl -lintl -lresolv -lnsl
         -lw -lsocket -lelf

    Station: -ldce -lthread -lucb -ldl -lintl -lresolv -lelf
         -lXm -lXmu -lXt -lXext -lX11 -lsocket -lnsl
         -ldl -lw -lm -lc

7. Patch List

None

APPENDIX A

A.1 Installation Change

The installation software previously checked for processes running. The script would report that the process `config` was running and ask the installer if it should be stopped. Responding yes to this question would cause the installation script to terminate the X-window environment. This problem has been fixed by replacing the grep lines located in the **KillProc** and **CheckRunningProc** routines. Below are the changes.

```
KillProc()
PROC_IDS=`ps -ea | egrep -e"[  ]${PROC_NAME}" | grep -v grep | awk '{ print $1 }' `

CheckRunningProc()
`grep -c "${PROC}" $TMPFILE ` -gt 0
```